

## A MINIATURIZED HIGH-PERFORMANCE TIME TAGGER FOR QUANTUM TECHNOLOGIES

A new center for the practical application of quantum communication is being set up at the Fraunhofer IIS/EAS site in Dresden (Germany). Since June 2022, the Application Center for the "Design of Scalable Electronic Systems for Quantum Communication" provides companies and researchers with access to flexible experimental test environments for the development of electronics for quantum communication systems.



A particular focus is the design of **compact time taggers**. In combination with detectors, time taggers are used to register the detection time of single photon events. As an essential building block for QKD systems, we design our time taggers with the requirements of quantum communications in mind.

## **Technical Features:**

- <10 ps RMS Jitter</p>
- 4 to 8 channels
- Dimensions: 6 cm x 6 cm
- Gigabit Ethernet
- TCXO, CLK in/out
- Customer-specific timetag postprocessing on-board

## **Customer Benefits:**

- Compact design
- Cost-effective solution for photonic quantum technologies
- Flexibility in use (network interface, multi-platform Python API)



Standard 19" Device

Dimension comparison between a standard 19" device and our compact novel time tagger

## CONTACT

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